



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,728	02/09/2004	Alberto Alvarez-Calderon F.	1186-007	9204

7590 02/26/2007
LAW OFFICES OF ADAM H. JACOBS
PATENT ATTORNEY
SUITE 726
1904 FARNAM STREET
OMAHA, NE 68102

EXAMINER

SWINEHART, EDWIN L

ART UNIT	PAPER NUMBER
----------	--------------

3617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/774,728

Applicant(s)

ALVAREZ-CALDERON F.,
ALBERTO

Examiner

Ed Swinehart

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 16-39 is/are pending in the application.
- 4a) Of the above claim(s) 28-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 16-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Newly submitted claims 28-39 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The original claims as filed were limited to a multi-hull craft and a man powered craft. Newly presented claims 28-39 are directed to a control element affixed to a lower border of a hull, which was not even discussed in the specification as originally filed.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 28-39 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. The amendment filed 7/13/2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material, which is not supported by the original disclosure, is as follows: The insertion made on page 73 of the specification is New Matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the hydrodynamic impeller must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. Claims 21-23 are objected to because of the following informalities: In claim 21, "said mid water region" and "said impeller means" lacks antecedent basis in the claims. Appropriate correction is required.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 6 and 21-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

Art Unit: 3617

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant claims a propulsion arrangement, which as claimed and described is not understood, as disclosure is lacking re same. The only impeller disclosed is an air impeller, which is positioned above the hulls, not submerged and between same.

Without complete and adequate disclosure of the invention, one of ordinary skill in the art could not make and/or use the invention. As originally disclosed, only a waterjet propulsion means had been employed. Such does not inherently provide support for an impeller.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 27, the parenthetical statement renders the metes and bounds of the claim difficult to determine.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3617

10. Claims 1,2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hendrickson.

Hendrickson discloses the claimed invention, including a central and lateral hulls dimensioned as claimed.

Re "displacement type", such fails to define over the central hull of Hendrickson, as such inherently operates within a displacement regime

Re claim 2, figure 2 shows a lateral hull shape which will result in production of lift as speed increases.

11. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Durand.

Durand discloses the claimed invention, including a craft utilizing an air impeller.

Re "man-powered", such is intended use, carrying no weight in the claim.

Re "adapted to be driven by an electric motor powered by batteries", such is an inherency of almost any watercraft, including that of Durand.

12. Claim 7 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Barker, Jr.

13. Claims 6,21,22 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Burg '920.

Burg provides a pair of impellers within a tunnel formed by a pair of hulls which converge towards each other as claimed.

14. Claims 1,3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Gabriel.

Art Unit: 3617

Gabriel provides a central hull and lateral hulls of the length to beam ratios as claimed. The lateral hulls are free of curvature.

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Hull.

Morgan discloses the claimed invention, including a pair of outboard hulls interconnected by an above the waterline supporting section, and having generally parallel outer sides, with inner sides converging. Morgan fails to disclose a plurality of impellers as is old and well known in the art as evidenced by Hull.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide serially arranged counter-rotating impellers to Morgan as taught by Hull.

Such a combination would have been desirable at the time of the invention so as to improve efficiency.

17. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Durand in view of Davis.

Durand fails to provide solar power.

Davis teaches same, as a power source for craft which can be used in a manual power mode.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide for an increase in efficiency, and the lessening of emissions in the craft of Durand as taught by Davis.

Such a combination would have been desirable, so as to provide a machine which does not pollute the environment.

18. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calderon in view of April.

Calderon discloses a hull as claimed. Calderon fails to discuss employing the hull as one of a multi-hill craft.

April teaches the use of a hull designed as a mono-hull, as one hull of a multi-hull vessel.

It would have been obvious to one of ordinary skill in the art at the time of the invention to construct a multi-hull vessel with the transonic hull of Calderon as taught by April.

Such a combination would have been desirable so as to provide a catamaran with superior wave making benefits.

19. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burg '294 in view of Pleuger et al.

Art Unit: 3617

Burg discloses the claimed hull configuration. Burg fails to disclose an impeller, although such is considered to have been old and well known in the art as evidenced by Pleuger.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an efficiency enhancing duct to each of the propellers of Burg as taught by Pleuger.

Such a combination would have been desirable so as to enhance the performance.

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Macduff discloses the invention of claim 8, including a man-powered craft utilizing an air impeller.

Re "man-powered", such is intended use, carrying no weight in the claim.
Re "adapted to be driven by an electric motor powered by batteries", such is an inherency of almost any watercraft, including that of Macduff.

Jansen and Naujeck teach solar power.

Cox, Takeuchi and Kort provide for channeling of water between lateral hulls.

21. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

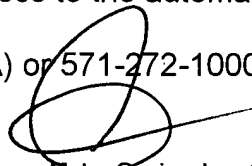
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ed Swinehart whose telephone number is 571-272-

Art Unit: 3617

6688. The examiner can normally be reached on Monday through Thursday 6:30 am to 2:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ed Swinehart
Primary Examiner
Art Unit 3617